

Amendment to the claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method for manufacturing electronic semiconductor devices comprising the steps of:

depositing a layer of hydrophobic material on a substrate;

depositing a "deep UV" photo-resist layer on the layer of hydrophobic material;

selectively removing said "deep UV" photo-resist layer in order to form an opening therein and expose a portion of said hydrophobic material;

selectively removing said hydrophobic material in correspondence with the exposed portion thereof in order to expose a portion of said substrate;

etching said substrate in correspondence with said exposed portion thereof through chemical etching with a watery acid solution; and

removing said layer of hydrophobic material and said "deep UV" photo-resist layer from the unexposed portions of the semiconductor substrate.

2. (Original) A method according to claim 1, wherein said hydrophobic material is chosen from the group comprising BARC, polytetrafluoroethylene, polyethylene, polystyrene and polyvinyl chloride.

3. (Original) A method according to claim 2, wherein said hydrophobic material is BARC.

4. (Original) A method according to claim 1, wherein said layer of hydrophobic material has a thickness comprised between 300 Å and 1600 Å.

5. (Original) A method according to claim 1, wherein the selective removal of said "deep UV" photo-resist layer is performed through photolithography.

6. (Original) A method according to claim 1, wherein the selective removal of said layer of hydrophobic material is performed through plasma etching.

7. (Original) A method according to claim 1, wherein the watery solution used in the etching step of said semiconductor substrate comprises hydrofluoric acid with a concentration comprised between 0,1% and 10%.

8. (Original) A method according to claim 1, wherein said removing step of the hydrophobic material layer from semiconductor substrate unexposed portions is performed through plasma etching.

9. (Original) A method according to claim 1, wherein said removing step of the "deep UV" photo-resist layer from semiconductor substrate unexposed portions is performed through photolithography.

10. (Original) A method for manufacturing electronic semiconductor devices, comprising:

depositing a hydrophobic layer directly on a semiconductor layer;

depositing a photo-resist layer on the hydrophobic layer;

selectively removing the photo-resist layer in order to form an opening therein and expose a portion of the hydrophobic layer;

selectively removing the hydrophobic layer in correspondence with the exposed portion thereof to expose a portion of the semiconductor layer;

etching the substrate in correspondence with the exposed portion of the semiconductor layer; and

removing the layer of hydrophobic material and the photo-resist layer from the unexposed portions of the semiconductor layer.

11. (Original) The method of claim 10, wherein the hydrophobic layer is chosen from the group comprising BARC, polytetrafluoroethylene, polyethylene, polystyrene and polyvinyl chloride.

12. (Original) The method of claim 11 wherein the hydrophobic layer is BARC.

13. (Original) The method of claim 10 wherein the hydrophobic layer has a thickness comprised between 300 Å and 1600 Å.

14. (Original) The method of claim 10 wherein the photo-resist layer is a “deep UV photo-resist layer.

15. (Original) The method of claim 10 wherein selectively removing the hydrophobic layer is performed through plasma etching.

16. (Original) The method of claim 10 wherein removing the hydrophobic layer from the unexposed portions of semiconductor layer is performed through plasma etching.

17. (Original) The method of claim 10 wherein etching the substrate is performed by chemical etching with a watery acid solution.

18 -20. (Cancelled)

21. (New) A method for manufacturing an integrated device, comprising:
providing an intermediate structure, said intermediate structure including a semiconductor layer, a hydrophobic layer positioned on the semiconductor layer, and a photo-resist layer positioned on the hydrophobic layer;
providing an opening in the photo-resist layer to expose a portion of the hydrophobic layer; and

providing an opening in the hydrophobic layer corresponding to the exposed portion thereof, that exposes a portion of the semiconductor layer.

22. (New) The method of claim 21 wherein the intermediate structure further comprises a semiconductor substrate underlying the semiconductor layer, the exposed portion of the semiconductor layer being etched to expose a portion of the semiconductor substrate.

23. (New) The method of claim 21 wherein the hydrophobic layer comprises a hydrophobic material selected from the group consisting of BARC, polytetrafluoroethylene, polyethylene, polystyrene and polyvinyl chloride.

24. (New) The method of claim 21 wherein the hydrophobic layer is positioned directly on the semiconductor layer, and the photo-resist layer is positioned directly on the hydrophobic layer.